

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐  
(highlight changes)

| APPLICATION FOR PERMIT TO DRILL  |  |   |                                 | 5. MINERAL LEASE NO:<br>ML-22793                                    | 6. SURFACE:<br>State |
|--|--|---|---------------------------------|---|----------------------|
| 1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>   |  |   |                                 | 7. IF INDIAN, ALLOTTEE OR TRIBE NAME:                               |                      |
| B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/> |  |   |                                 | 8. UNIT or CA AGREEMENT NAME:<br>UNIT #891008900A                   |                      |
| 2. NAME OF OPERATOR:<br>KERR MCGEE OIL & GAS ONSHORE L.P.  |  |   |                                 | 9. WELL NAME and NUMBER:<br>NBU 1021-30N                            |                      |
| 3. ADDRESS OF OPERATOR:<br>1368 S 1200 E CITY VERNAL STATE UT ZIP 84078  |  |   | PHONE NUMBER:<br>(435) 781-7024 | 10. FIELD AND POOL, OR WILDCAT:<br>NATURAL BUTTES                   |                      |
| 4. LOCATION OF WELL (FOOTAGES)<br>AT SURFACE: 942'FSL, 1876'FWL 619938X 39.914054<br>AT PROPOSED PRODUCING ZONE: 4418951Y -109.596728  |  |   |                                 | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>SESW 30 10S 21E |                      |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE:<br>20.1 MILES SOUTH OF OURAY, UTAH   |  |   |                                 | 12. COUNTY:<br>UINTAH   | 13. STATE:<br>UTAH   |
| 15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)<br>942'  |  | 16. NUMBER OF ACRES IN LEASE:<br>643.84 |                                 | 17. NUMBER OF ACRES ASSIGNED TO THIS WELL:<br>40.00                 |                      |
| 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)<br>REFER TO TOPO C   |  | 19. PROPOSED DEPTH:<br>9,450            |                                 | 20. BOND DESCRIPTION:<br>RLB0005237                                 |                      |
| 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):<br>5348'GL   |  | 22. APPROXIMATE DATE WORK WILL START:   |                                 | 23. ESTIMATED DURATION:   |                      |

| 24. PROPOSED CASING AND CEMENTING PROGRAM |   |      |       |               |   |            |          |
|---|---|------|-------|---------------|---|------------|----------|
| SIZE OF HOLE                              | CASING SIZE, GRADE, AND WEIGHT PER FOOT |      |       | SETTING DEPTH | CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT |            |          |
| 12 1/4"                                   | 9 5/8                                   | H-40 | 32.3# | 2,000         | 265 SX CLASS G                                  | 1.18 YIELD | 15.6 PPG |
| 7 7/8"                                    | 4 1/2                                   | I-80 | 11.6# | 9,450         | 1990 SX 50/50 POZ                               | 1.31 YIELD | 14.3 PPG |
|   |   |      |       |               |   |            |          |
|   |   |      |       |               |   |            |          |
|   |   |      |       |               |   |            |          |
|   |   |      |       |               |   |            |          |
|   |   |      |       |               |   |            |          |
|   |   |      |       |               |   |            |          |

| 25. ATTACHMENTS   |  |
|---|--|
| VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES: |  |
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER        | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                                   |
| <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER    | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

|   |                                    |
|---|------------------------------------|
| NAME (PLEASE PRINT) SHEILA UPCHEGO  | TITLE SENIOR LAND ADMIN SPECIALIST |
| SIGNATURE  | DATE 1/24/2007                     |

(This space for State use only)

API NUMBER ASSIGNED: 43-047-39025

Approved by the  
Utah Division of  
Oil, Gas and Mining

RECEIVED  
FEB 02 2007

APPROVAL:

Date: 02-28-07

By: 

(See Instructions on Reverse Side)

DIV. OF OIL, GAS & MINING

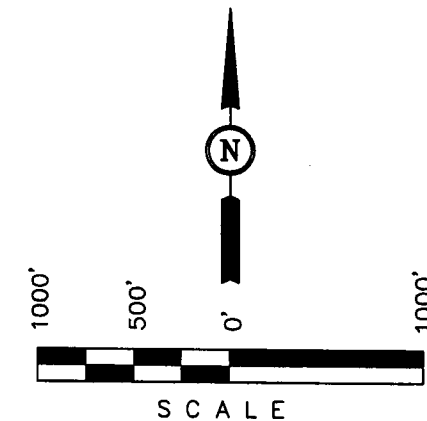
T10S, R21E, S.L.B.&M.

Kerr-McGee Oil & Gas Onshore LP

Well location, NBU #1021-30N, located as shown in the SE 1/4 SW 1/4 of Section 30, T10S, R21E, S.L.B.&M., Uintah County, Utah.

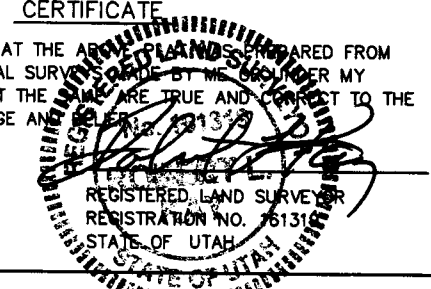
### BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



### CERTIFICATE

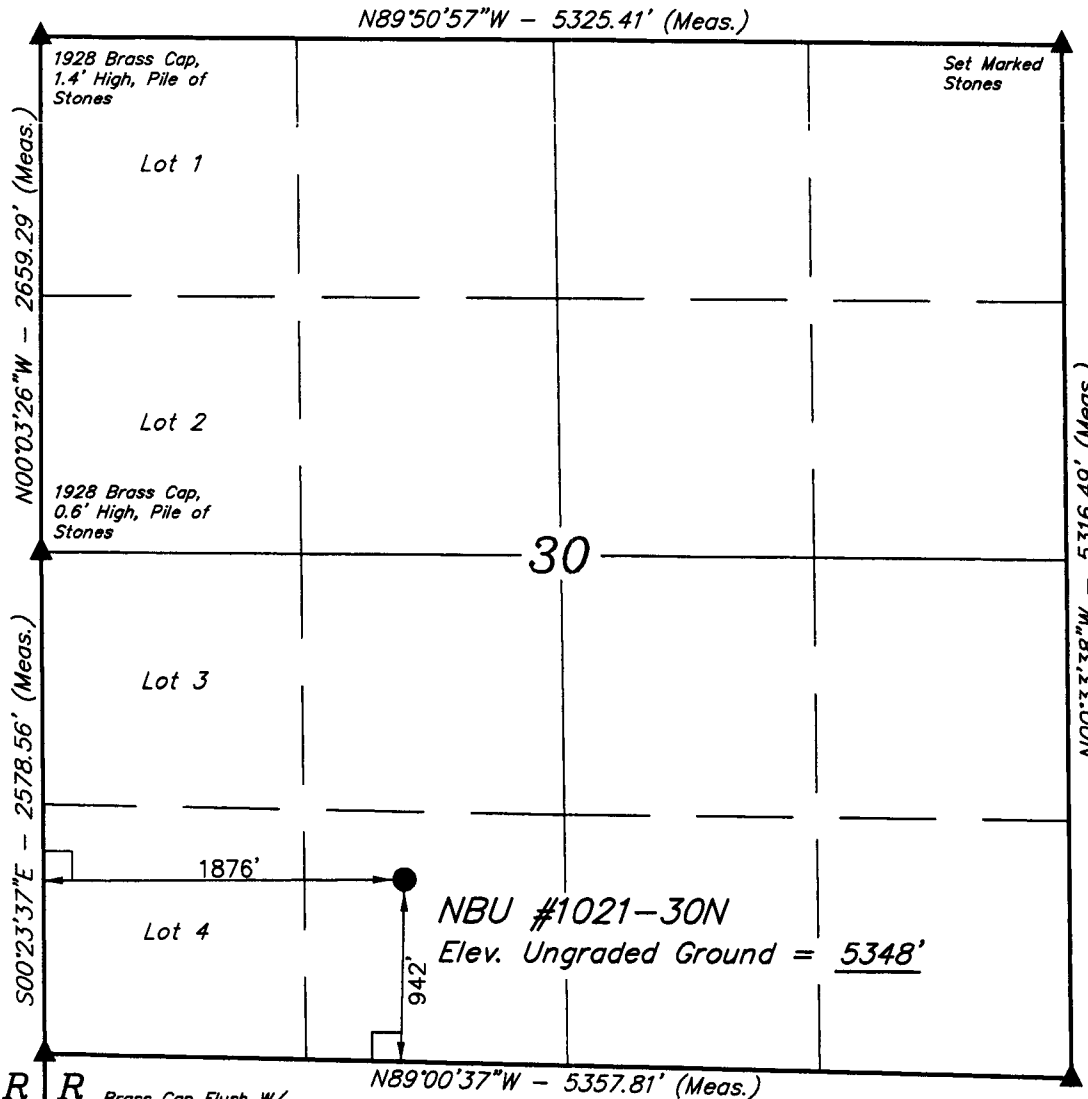
THIS IS TO CERTIFY THAT THE ABOVE PLANS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



REGISTERED LAND SURVEYOR  
REGISTRATION NO. 76131  
STATE OF UTAH

**UTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

|                         |   |                         |
|-------------------------|---|-------------------------|
| SCALE<br>1" = 1000'     | DATE SURVEYED:<br>11-02-06              | DATE DRAWN:<br>11-15-06 |
| PARTY<br>D.K. T.H. C.H. | REFERENCES<br>G.L.O. PLAT               |                         |
| WEATHER<br>COOL         | FILE<br>Kerr-McGee Oil & Gas Onshore LP |                         |



### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)  
LATITUDE = 39°54'50.33" (39.913981)  
LONGITUDE = 109°35'50.69" (109.597414)  
(NAD 27)  
LATITUDE = 39°54'50.45" (39.914014)  
LONGITUDE = 109°35'48.21" (109.596725)

### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

R R  
20 21  
E E  
Brass Cap Flush W/  
Pile of Stones

**NBU 1021-30N  
SE/SW SEC. 30, T10S, R21E  
UINTAH COUNTY, UTAH  
ML-22793**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

| <u>Formation</u>        | <u>Depth</u> |
|-------------------------|--------------|
| Uinta                   | 0- Surface   |
| Green River             | 1140'        |
| Top of Birds Nest Water | 1366'        |
| Mahogany                | 1895'        |
| Wasatch                 | 4321'        |
| Mesaverde               | 7263'        |
| MVU2                    | 8268'        |
| MVL1                    | 8781'        |
| TD                      | 9450'        |

**2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

| <u>Substance</u> | <u>Formation</u>        | <u>Depth</u> |
|------------------|-------------------------|--------------|
| Water            | Green River             | 1140'        |
|                  | Top of Birds Nest Water | 1366'        |
|                  | Mahogany                | 1895'        |
| Gas              | Wasatch                 | 4321'        |
| Gas              | Mesaverde               | 7263'        |
| Gas              | MVU2                    | 8268'        |
| Gas              | MVL1                    | 8781'        |
| Water            | N/A                     |              |
| Other Minerals   | N/A                     |              |

**3. Pressure Control Equipment (Schematic Attached)**

*Please refer to the attached Drilling Program.*

**4. Proposed Casing & Cementing Program:**

*Please refer to the attached Drilling Program.*

**5. Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

**6. Evaluation Program:**

*Please refer to the attached Drilling Program.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9450' TD, approximately equals 5859 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3780 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please refer to the attached Drilling Program.*

10. **Other Information:**

*Please refer to the attached Drilling Program.*



# KERR-McGEE OIL & GAS ONSHORE LP **DRILLING PROGRAM**

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE January 23, 2007  
WELL NAME NBU 1021-30N TD 9,450' MD/TVD  
FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,348' GL KB 5,363'  
SURFACE LOCATION SE/SW SEC. 30, T10S, R21E 942'FSL, 1876'FWL BHL Straight Hole  
Latitude: 39.913981 Longitude: 109.597414  
OBJECTIVE ZONE(S) Wasatch/Mesaverde  
ADDITIONAL INFO Regulatory Agencies: UDOGM (SURF & MINERALS), BLM, Tri-County Health Dept.

| GEOLOGICAL   |                           |             | MECHANICAL |  |                                       |
|--|---------------------------|-------------|------------|--|---------------------------------------|
| LOGS   | FORMATION                 | DEPTH       | HOLE SIZE  | CASING SIZE                                  | MUD WEIGHT                            |
|  |                           | 40'         |            | 14"  |                                       |
|  |                           |             | 12-1/4"    | 9-5/8", 32.3#, H-40, STC                     | Air mist                              |
| Catch water sample, if possible, from 0 to 4,321'  |                           |             |            |  |                                       |
|  | Green River @             | 1,140'      |            |  |                                       |
|  | Top of Birds Nest Water @ | 1366'       |            |  |                                       |
|  | Mahogany @                | 1,895'      |            |  |                                       |
|  | Preset fl GL @            |             |            |  |                                       |
|  |                           | 2,000' MD   |            |  |                                       |
| Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone. |                           |             |            |  |                                       |
| Mud logging program TBD  |                           |             |            |  |                                       |
| Open hole logging program fl TD - surf csg   |                           |             |            |  |                                       |
|  | Wasatch @                 | 4,321'      | 7-7/8"     | 4-1/2", 11.6#, I-80 or equivalent LTC casing | Water/Fresh Water Mud 8.3-11.5 ppg    |
|  | Mverde @                  | 7,263'      |            |  |                                       |
|  | MVU2 @                    | 8,268'      |            |  |                                       |
|  | MVL1 @                    | 8,781'      |            |  |                                       |
|  |                           |             |            |  | Max anticipated Mud required 11.5 ppg |
|  |                           | TD @ 9,450' |            |  |                                       |



# **KERR-McGEE OIL & GAS ONSHORE LP** **DRILLING PROGRAM**

## **CASING PROGRAM**

|            | SIZE   | INTERVAL  | WT.   | GR.  | CPLG. | DESIGN FACTORS |          |         |
|------------|--------|-----------|-------|------|-------|----------------|----------|---------|
|            |        |           |       |      |       | BURST          | COLLAPSE | TENSION |
| CONDUCTOR  | 14"    | 0-40'     |       |      |       | 2270           | 1370     | 254000  |
| SURFACE    | 9-5/8" | 0 to 2000 | 32.30 | H-40 | STC   | 0.64*****      | 1.46     | 4.49    |
|            |        |           |       |      |       | 7780           | 6350     | 201000  |
| PRODUCTION | 4-1/2" | 0 to 9450 | 11.60 | I-80 | LTC   | 2.18           | 1.12     | 2.10    |

- 1) Max Anticipated Surf. Press (MASP) (Surface Casing) = (Pore Pressure at next csg point - (0.22 psi/ft-partial evac gradient x TVD of next csg point))  
2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)  
(Burst Assumptions: TD = 11.5 ppg) .22 psi/ft = gradient for partially evac wellbore  
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
MASP 3572 psi

\*\*\*\*\* Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

## **CEMENT PROGRAM**

|            |                 | FT. OF FILL | DESCRIPTION  | SACKS   | EXCESS | WEIGHT | YIELD |
|------------|-----------------|-------------|--|---------|--------|--------|-------|
| SURFACE    | LEAD            | 500         | Premium cmt + 2% CaCl<br>+ .25 pps flocele   | 215     | 60%    | 15.60  | 1.18  |
| Option 1   | TOP OUT CMT (1) | 200         | 20 gals sodium silicate + Premium cmt<br>+ 2% CaCl + .25 pps flocele                             | 50      |        | 15.60  | 1.18  |
|            | TOP OUT CMT (2) | as required | Premium cmt + 2% CaCl  | as req. |        | 15.60  | 1.18  |
| SURFACE    |                 |             | <b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>                  |         |        |        |       |
| Option 2   | LEAD            | 1500        | Prem cmt + 16% Gel + 10 pps gilsonite<br>+ .25 pps Flocele + 3% salt BWOC                        | 170     | 35%    | 11.00  | 3.82  |
|            | TAIL            | 500         | Premium cmt + 2% CaCl<br>+ .25 pps flocele   | 180     | 35%    | 15.60  | 1.18  |
|            | TOP OUT CMT     | as required | Premium cmt + 2% CaCl  | as req. |        | 15.60  | 1.18  |
| PRODUCTION | LEAD            | 3,820'      | Premium Lite II + 3% KCl + 0.25 pps<br>celloflake + 5 pps gilsonite + 10% gel<br>+ 0.5% extender | 420     | 60%    | 11.00  | 3.38  |
|            | TAIL            | 5,630'      | 50/50 Poz/G + 10% salt + 2% gel<br>+.1% R-3  | 1570    | 60%    | 14.30  | 1.31  |

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

## **FLOAT EQUIPMENT & CENTRALIZERS**

|            |   |
|------------|---|
| SURFACE    | Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.                   |
| PRODUCTION | Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers. |

## **ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder &

tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper

& lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

Brad Laney

DATE:

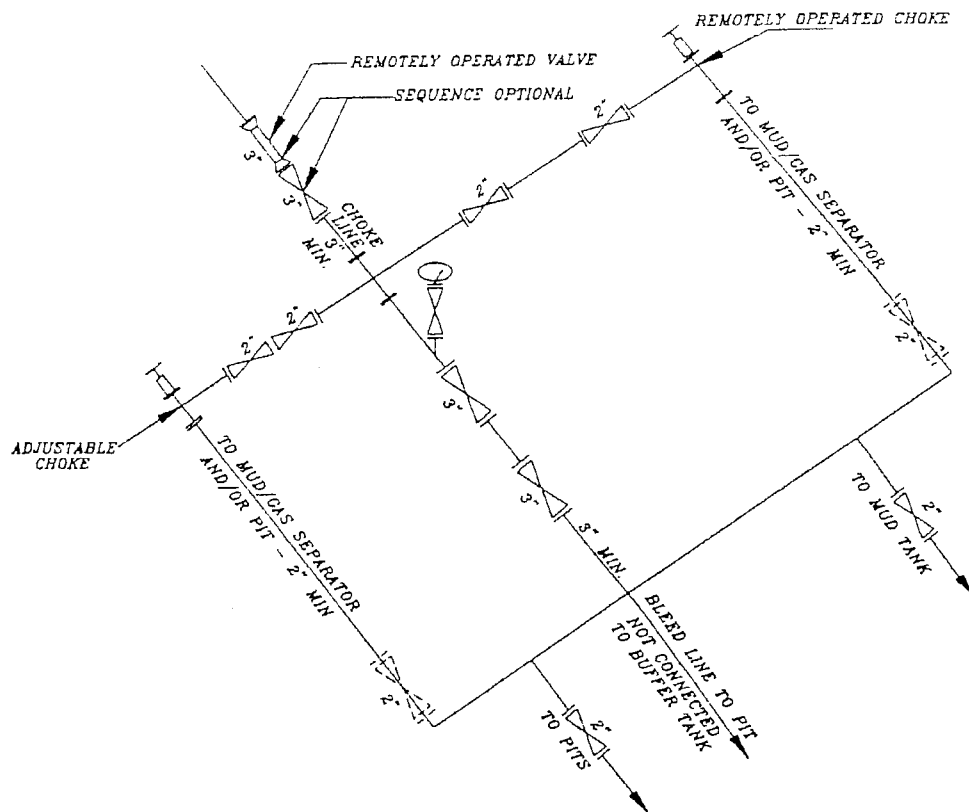
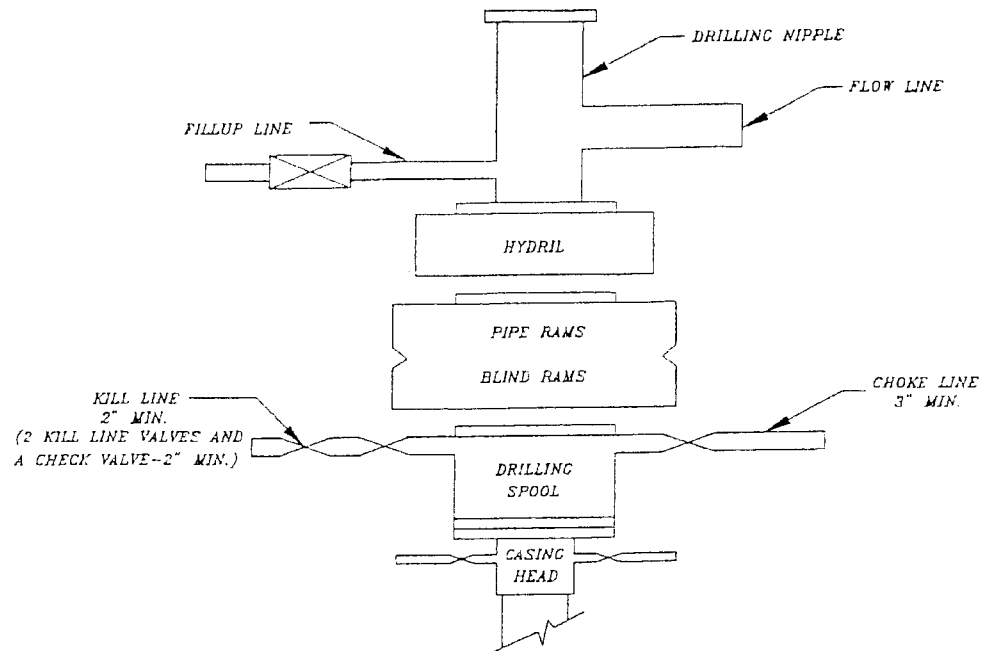
DRILLING SUPERINTENDENT:

Randy Bayne

DATE:

NBU1021-30N DHD.xls

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



**NBU 1021-30N  
SE/SW SEC. 30, T10S, R21E  
Uintah County, UT  
ML-22793**

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

**1. Existing Roads:**

Refer to Topo Map A for directions to the location.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

**2. Planned Access Roads:**

Approximately 0.5 +/- miles of new access road is proposed. Refer to Topo Map B for the location of the proposed access road.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.

***Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.***

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

**3. Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

*The following guidelines will apply if the well is productive.*

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain



fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Carlsbad Canyon, standard color number 2.5Y 6/2.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately 2600' +/- of 4" pipeline is proposed from the location to a tie-in point. Refer to Topo Map D.

**5. Location and Type of Water Supply:**

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

**6. Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used, it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E.

**8. Ancillary Facilities:**

None are anticipated.

**9. Well Site Layout: (See Location Layout Diagram)**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

The reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance

between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Location size may change prior to the drilling of the well due to current rig availability. If the proposed location is not large enough to accommodate the drilling rig the location will be re-surveyed and a Form 9 shall be submitted.

10. **Plans for Reclamation of the Surface:**

*Producing Location:*

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

*Dry Hole/Abandoned Location:*

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment.

Reseeding operations will be performed after completion of other reclamation operations.

**11. Surface Ownership:**

SITLA  
675 East 500 South, Suite 500  
Salt Lake City, UT 84102

**12. Other Information:**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey will be submitted when report becomes available.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

**13. Lessee's or Operators's Representative & Certification:**

Sheila Upchego  
Senior Land Admin Specialist  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East.  
Vernal, UT 84078  
(435) 781-7024

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435)781-7018

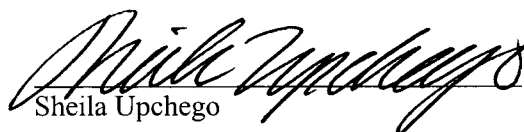
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Sheila Upchego

1/24/2007

Date

# Kerr-McGee Oil & Gas Onshore LP

NBU #1021-30N

SECTION 30, T10S, R21E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; TURN LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 9.1 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 2.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN A EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 4.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD FOR THE #1021-30J TO THE NORHTWEST; FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE BEGINNING OF THE ACCESS ROAD TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 51.1 MILES.

# Kerr-McGee Oil & Gas Onshore LP

NBU #1021-30N

LOCATED IN UTAH COUNTY, UTAH  
SECTION 30, T10S, R21E, S.L.B.&M.

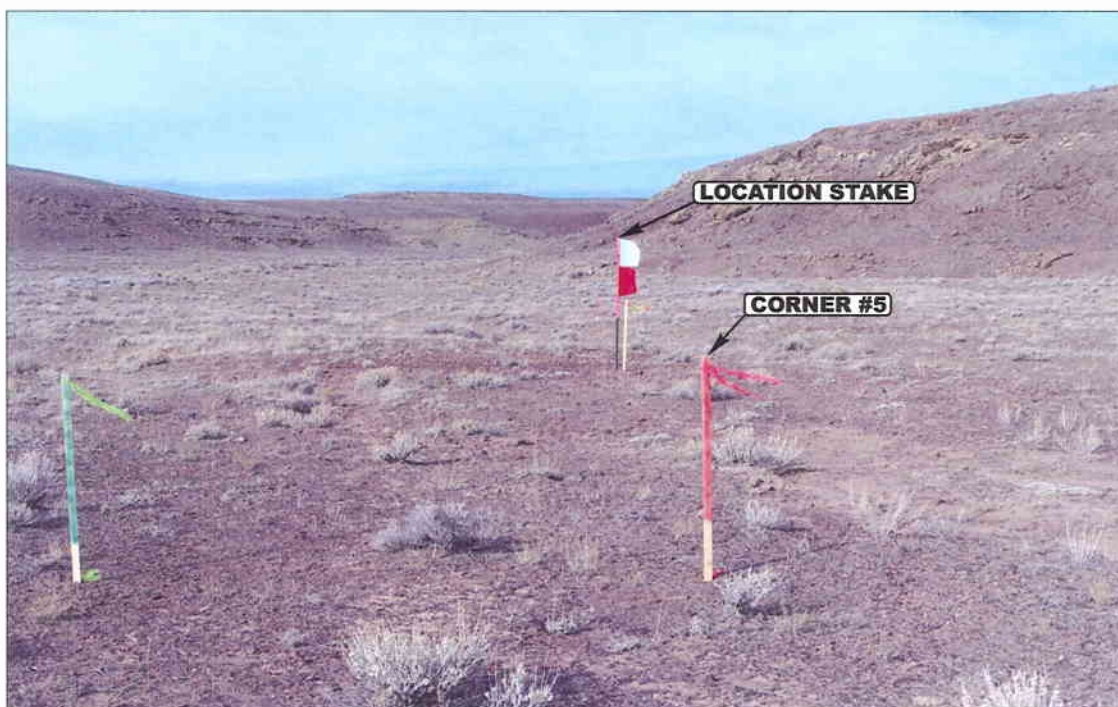


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW FROM BEGINNING OF THE PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

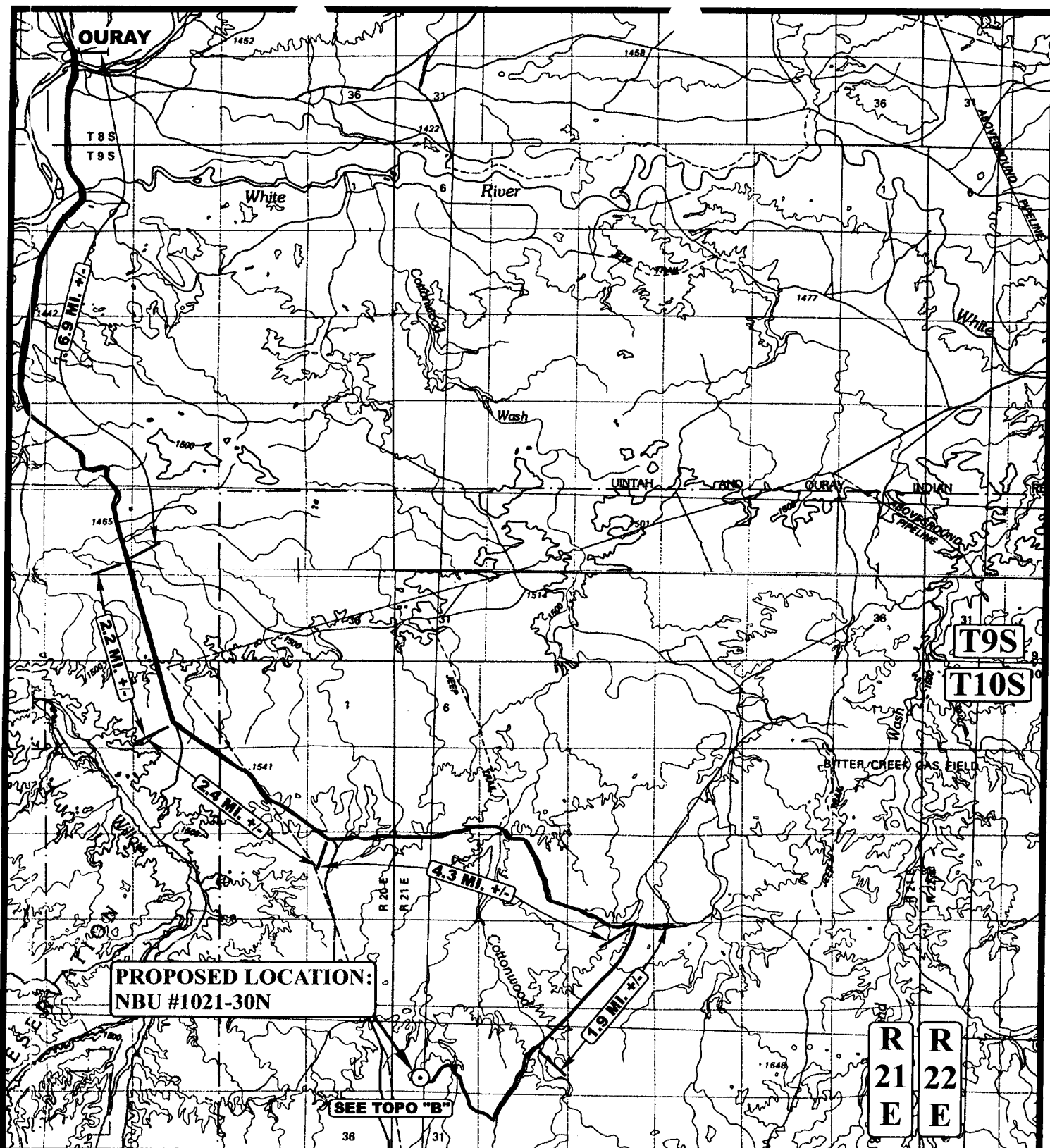
11 16 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K.

DRAWN BY: S.L.

REVISED: 00-00-00



# **LEGEND:**

⊙ PROPOSED LOCATION



## **Kerr-McGee Oil & Gas Onshore LP**

NBU #1021-30N

SECTION 30, T10S, R21E, S.L.B.&M.

942' FSL 1876' FWL



**Utah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

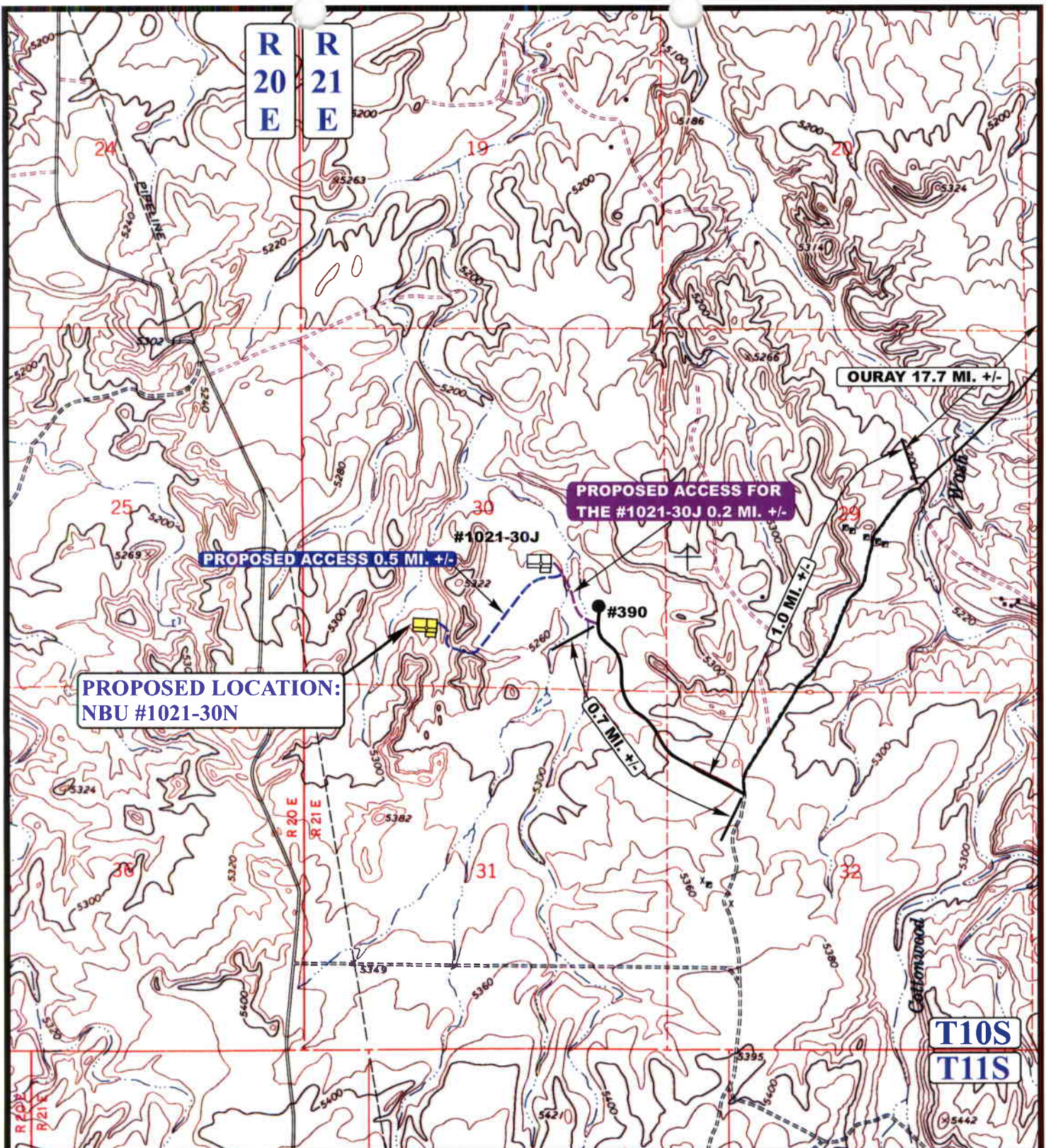
**TOPOGRAPHIC  
MAP**

|           |           |           |
|-----------|-----------|-----------|
| <b>11</b> | <b>16</b> | <b>06</b> |
| MONTH     | DAY       | YEAR      |

SCALE: 1:100,000 DRAWN BY: S.L. REVISED: 00-00-00







# LEGEND:

|   |                       |
|---|-----------------------|
| <span style="color: blue;">---</span>   | PROPOSED ACCESS ROAD  |
| <span style="color: purple;">---</span> | PROPOSED ACCESS ROAD  |
| <span style="color: green;">---</span>  | SERVICING OTHER WELLS |
| <span style="color: black;">---</span>  | EXISTING ROAD         |

**Kerr-McGee Oil & Gas Onshore LP**

**NBU #1021-30N**

**SECTION 30, T10S, R21E, S.L.B.&M.**

**942' FSL 1876' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC  
MAP**

**11 16 06**  
MONTH DAY YEAR

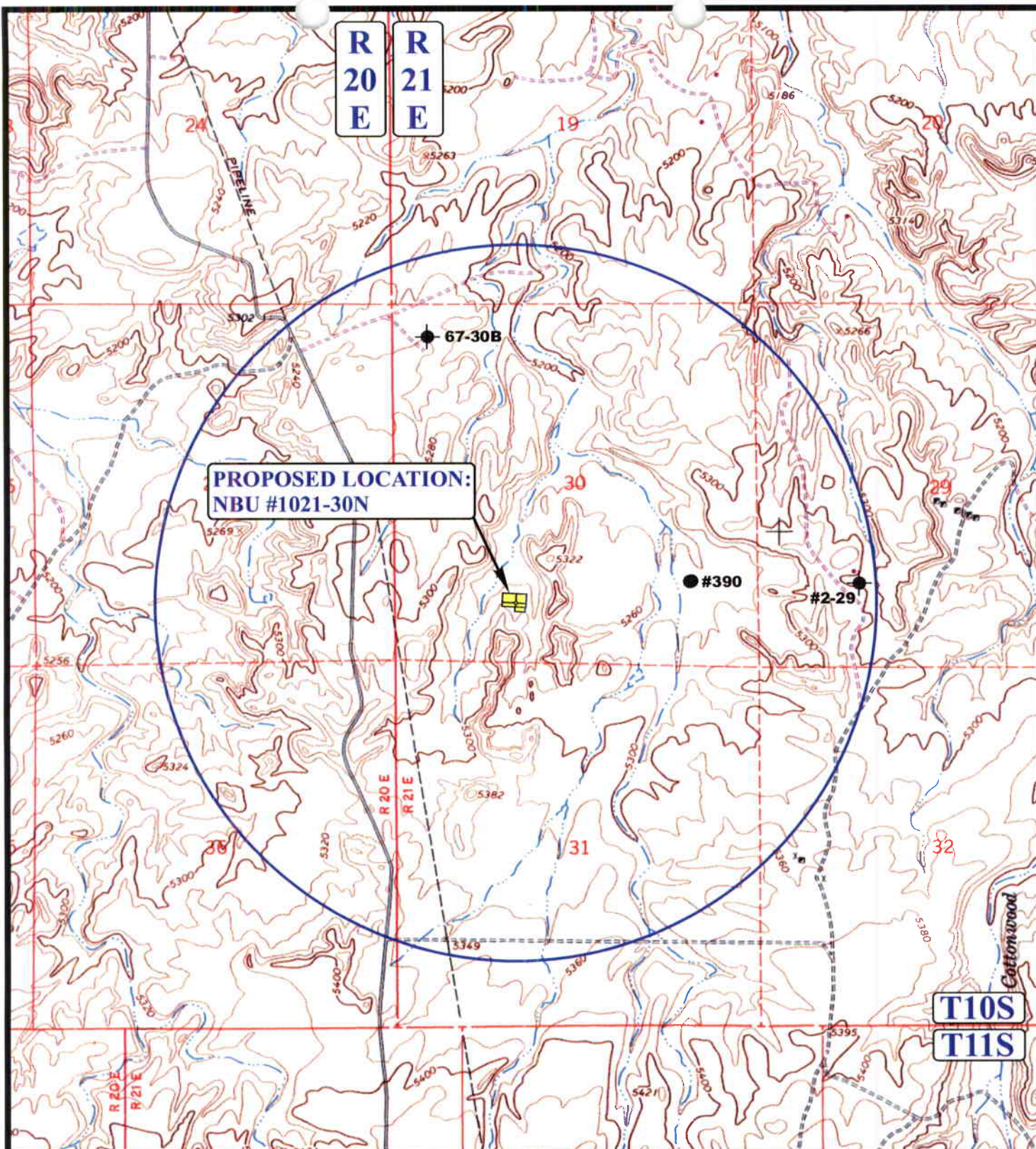
SCALE: 1" = 2000'

DRAWN BY: S.L.

REVISED: 00-00-00







# LEGEND:

- |                 |                       |
|-----------------|-----------------------|
| DISPOSAL WELLS  | WATER WELLS           |
| PRODUCING WELLS | ABANDONED WELLS       |
| SHUT IN WELLS   | TEMPORARILY ABANDONED |

## Kerr-McGee Oil & Gas Onshore LP

**NBU #1021-30N**  
**SECTION 30, T10S, R21E, S.L.B.&M.**  
**942' FSL 1876' FWL**



**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
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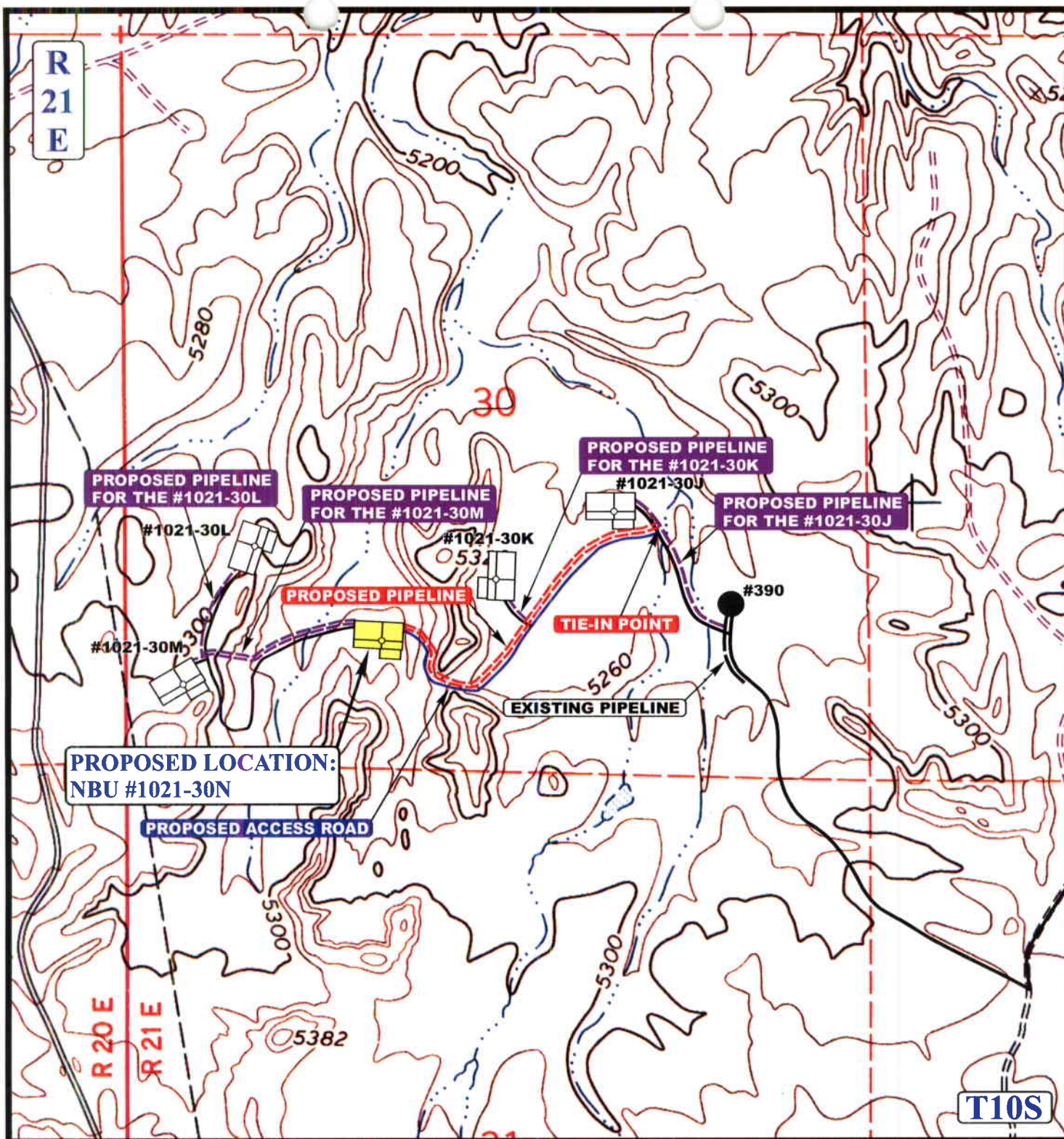
**TOPOGRAPHIC**  
**MAP**

**11 16 06**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: S.L. REVISED: 00-00-00







**APPROXIMATE TOTAL PIPELINE DISTANCE = 2,600' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE
- SERVICING OTHER WELLS

**Kerr-McGee Oil & Gas Onshore LP**

**NBU #1021-30N**

**SECTION 30, T10S, R21E, S.L.B.&M.**

**942' FSL 1876' FWL**



**Utah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC  
MAP**

**11 16 06**  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: S.L. REVISED: 00-00-00





# Kerr-McGee Oil & Gas Onshore LP

NBU #1021-30N

PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH

SECTION 30, T10S, R21E, S.L.B.&M.



PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

11 16 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.K.

DRAWN BY: S.L.

REVISED: 00-00-00

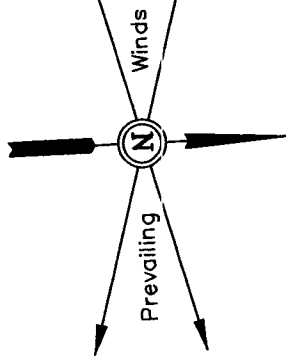
# Kerr-McGee Oil & Gas Onshore LP

## LOCATION LAYOUT FOR

NBU #1021-30N

SECTION 30, T10S, R21E, S.L.B.&M.

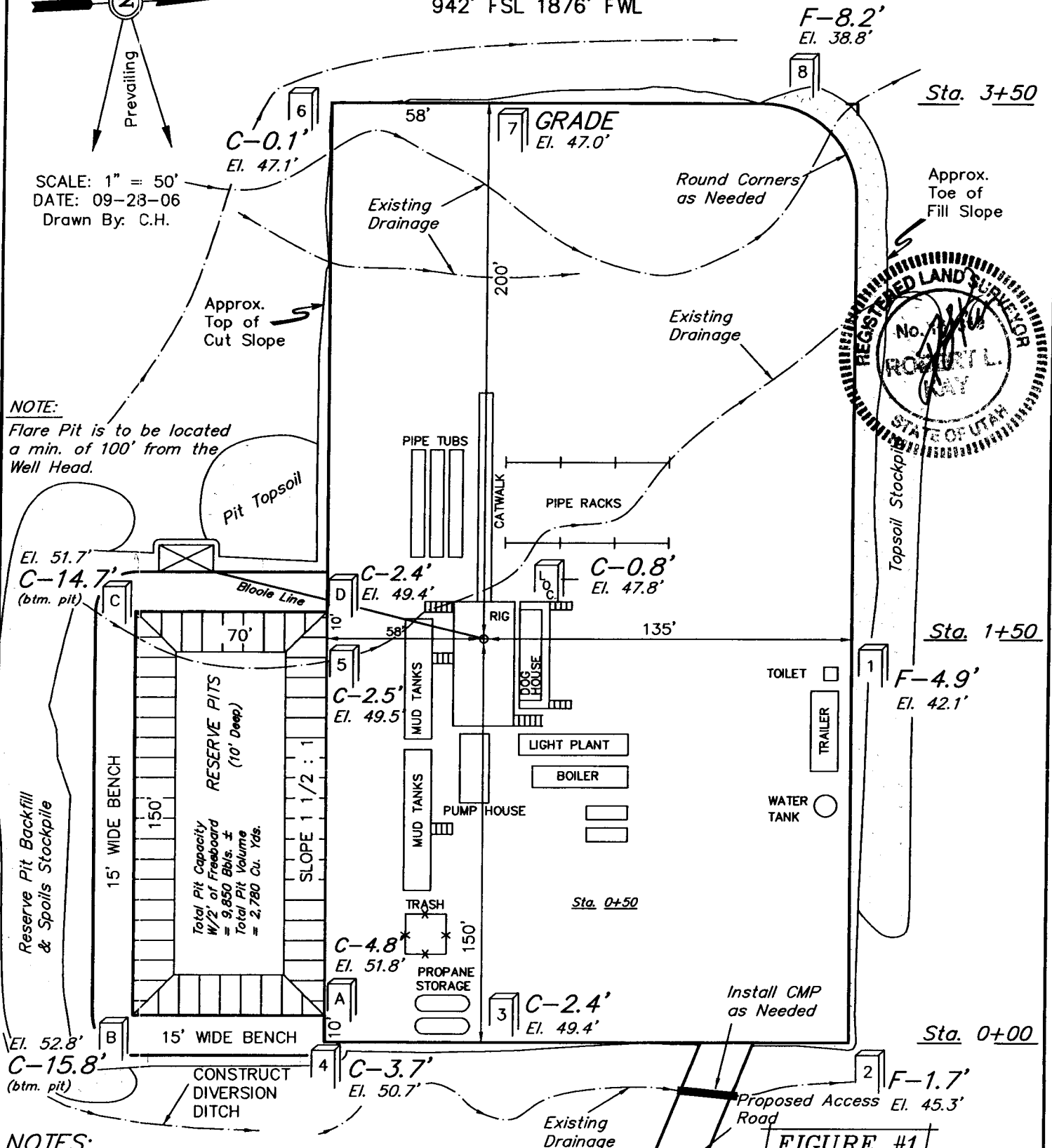
942' FSL 1876' FWL



SCALE: 1" = 50'  
DATE: 09-28-06  
Drawn By: C.H.

### NOTE:

Flare Pit is to be located a min. of 100' from the Well Head.



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 5247.8'

FINISHED GRADE ELEV. AT LOC. STAKE = 5247.0'

FIGURE #1

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

## TYPICAL CROSS SECTIONS FOR

NBU #1021-30N

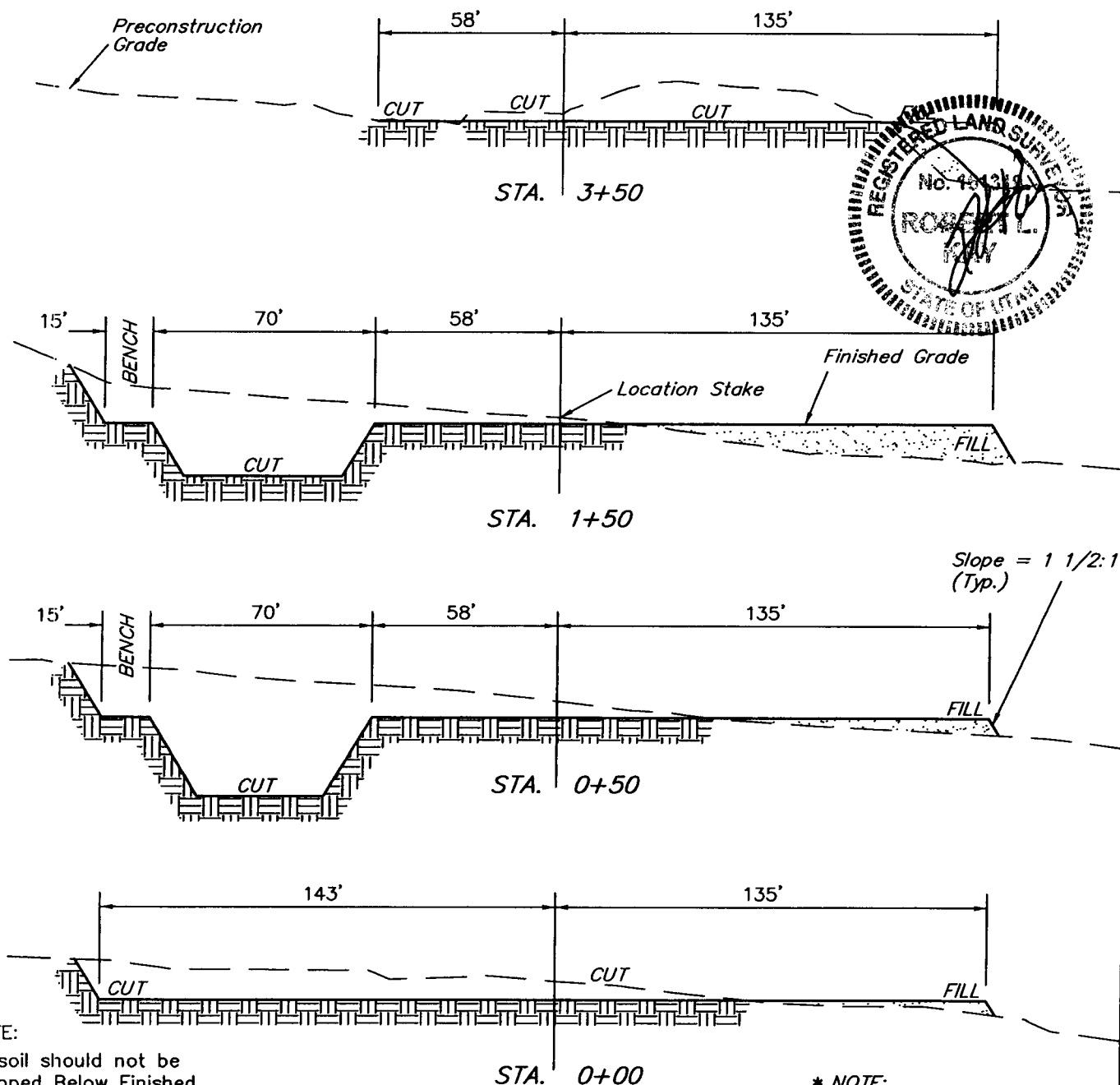
SECTION 30, T10S, R21E, S.L.B.&M.

942' FSL 1876' FWL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 09-28-06

Drawn By: C.H.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

#### CUT

(6") Topsoil Stripping = 1,700 Cu. Yds.

Remaining Location = 6,770 Cu. Yds.

TOTAL CUT = 8,470 CU.YDS.

FILL = 5,380 CU.YDS.

EXCESS MATERIAL = 3,090 Cu. Yds.

Topsoil & Pit Backfill = 3,090 Cu. Yds.  
(1/2 Pit Vol.)

EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/02/2007

API NO. ASSIGNED: 43-047-39025

WELL NAME: NBU 1021-30N

OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )

PHONE NUMBER: 435-781-7024

CONTACT: SHEILA UPCHEGO

PROPOSED LOCATION:

SESW 30 100S 210E

SURFACE: 0942 FSL 1876 FWL

BOTTOM: 0942 FSL 1876 FWL

COUNTY: UTAH

LATITUDE: 39.91405 LONGITUDE: -109.5967

UTM SURF EASTINGS: 619938 NORTHINGS: 4418951

FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /

| Tech Review | Initials | Date    |
|-------------|----------|---------|
| Engineering | DND      | 2/28/07 |
| Geology     |          |         |
| Surface     |          |         |

LEASE TYPE: 3 - State

LEASE NUMBER: ML-22793

PROPOSED FORMATION: WSMVD

SURFACE OWNER: 3 - State

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[] Ind[] Sta[] Fee[]  
(No. 22013542 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-8496 )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

☐ R649-2-3.  
Unit: NATURAL BUTTES  
☐ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
☐ R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 12314  
Eff Date: 12-2-1999  
Siting: 460' to 1260' from uncomm. Tracts  
☐ R649-3-11. Directional Drill

COMMENTS:

Needs Profile (02-13-07)

STIPULATIONS:

1- STATEMENT OF BASIS  
2- OIL SHALE  
3- Surface Csg Cont Stop





# Application for Permit to Drill

## Statement of Basis

2/15/2007

Utah Division of Oil, Gas and Mining

Page 1

|                  |  |                     |                          |                  |            |  |  |  |
|------------------|--|---------------------|--------------------------|------------------|------------|--|--|--|
| <b>APD No</b>    | <b>API WellNo</b>  | <b>Status</b>       | <b>Well Type</b>         | <b>Surf Ownr</b> | <b>CBM</b> |  |  |  |
| 251              | 43-047-39025-00-00   |                     | GW                       | S                | No         |  |  |  |
| <b>Operator</b>  | KERR-MCGEE OIL & GAS ONSHORE, LP                             |                     | <b>Surface Owner-APD</b> |                  |            |  |  |  |
| <b>Well Name</b> | NBU 1021-30N   | <b>Unit</b>         |                          |                  |            |  |  |  |
| <b>Field</b>     | UNDESIGNATED   | <b>Type of Work</b> |                          |                  |            |  |  |  |
| <b>Location</b>  | SESW 30 10S 21E S 0 FL 0 FL GPS Coord (UTM) 619938E 4418951N |                     |                          |                  |            |  |  |  |

### Geologic Statement of Basis

Kerr McGee proposes to set 1,900' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,300'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 30. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill  
APD Evaluator

2/15/2007  
Date / Time

### Surface Statement of Basis

The general area is within the Cottonwood Wash Drainage. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle draws, which flow into Cottonwood Wash. The draws are occasionally rimmed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Cottonwood Wash is an ephemeral drainage, which drains northerly approximately 11 miles to the White River. No seeps, springs or streams exist in the area.

This location is approximately 20 miles southeast of Ouray, Ut. and is accessed by the Seep Ridge Road to the Uintah County Love Unit Road then by existing or planned oil field development roads to within 0.5 miles of the site, which will require new construction.

The proposed location is in a moderately wide, gentle swale which slopes to the northwest. Terrain is rolling with higher ridges. A knob with an outcrop of bedrock is within the location. Small swales within the location are planned for diversions around the location.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location. The selected location appears to be the best site for drilling and operating a well in the immediate area.

Floyd Bartlett  
Onsite Evaluator

2/13/2007  
Date / Time

### Conditions of Approval / Application for Permit to Drill

|                 |   |
|-----------------|---|
| <b>Category</b> | <b>Condition</b>  |
| Pits            | A synthetic liner with a minimum thickness of 20 mils with a felt subliner shall be properly installed and maintained in the reserve pit. |
| Surface         | Drainages adjacent to the proposed pad shall be diverted around the location.   |

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** KERR-MCGEE OIL & GAS ONSHORE, LP  
**Well Name** NBU 1021-30N  
**API Number** 43-047-39025-0 **APD No** 251 **Field/Unit** UNDESIGNATED  
**Location:** 1/4,1/4 SESW **Sec** 30 **Tw** 10S **Rng** 21E 0 FL 0 FL  
**GPS Coord (UTM)** 619937 4418951 **Surface Owner**

### Participants

Floyd Bartlett and David Hackford (DOGM), Jim Davis (SITLA), Carroll Estes, Tony Kznick, and Clay Einerson (Kerr McGee), David Kay (Uintah Engineering and Land Surveying), and Ben Williams (UDWR)

### Regional/Local Setting & Topography

The general area is within the Cottonwood Wash Drainage. The area is characterized by rolling hills and benches, which are frequently intersected by somewhat gentle draws, which flow into Cottonwood Wash. The draws are occasionally rimmed with steep side hills, which have exposed sand stone bedrock cliffs along the rims. Cottonwood Wash is an ephemeral drainage, which drains northerly approximately 11 miles to the White River. No seeps, springs or streams exist in the area.

This location is approximately 20 miles southeast of Ouray, Ut. and is accessed by the Seep Ridge Road to the Uintah County Love Unit Road then by existing or planned oil field development roads to within 0.5 miles of the site, which will require new construction.

The proposed location is in a moderately wide, gentle swale which slopes to the northwest. Terrain is rolling with higher ridges. A knob with an outcrop of bedrock is within the location. Small swales within the location are planned for diversions around the location.

### Surface Use Plan

#### **Current Surface Use**

Grazing  
Wildlife Habitat  
Recreational

#### **New Road**

| Miles | Well Pad  |            | Src Const Material | Surface Formation |
|-------|-----------|------------|--------------------|-------------------|
| 0.5   | Width 278 | Length 350 | Onsite             | UNTA              |

**Ancillary Facilities** N

### Waste Management Plan Adequate? Y

### Environmental Parameters

**Affected Floodplains and/or Wetland** N

#### **Flora / Fauna**

Snow covered the vegetation on the area. Identifiable vegetation consisted of shadscale, horse brush, spiny hopsage, cheat grass and greasewood.

Antelope, cattle, rabbits, coyotes, and small mammals, birds and raptors.

**Soil Type and Characteristics**

Moderately deep sandy loam with some surface rock.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required** Y

Around both ends of the location.

**Berm Required?** N

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** Y      **Paleo Potential Observed?** N      **Cultural Survey Run?** Y      **Cultural Resources?**

**Reserve Pit****Site-Specific Factors****Site Ranking**

|  |                  |    |
|--|------------------|----|
| <b>Distance to Groundwater (feet)</b>    | >200             | 0  |
| <b>Distance to Surface Water (feet)</b>  | >1000            | 0  |
| <b>Dist. Nearest Municipal Well (ft)</b> | >5280            | 0  |
| <b>Distance to Other Wells (feet)</b>    | 300 to 1320      | 10 |
| <b>Native Soil Type</b>                  | Mod permeability | 10 |
| <b>Fluid Type</b>                        | Fresh Water      | 5  |
| <b>Drill Cuttings</b>                    | Normal Rock      | 0  |
| <b>Annual Precipitation (inches)</b>     | <10              | 0  |
| <b>Affected Populations</b>              | <10              | 0  |
| <b>Presence Nearby Utility Conduits</b>  | Not Present      | 0  |

**Final Score** 25    1    **Sensitivity Level**

**Characteristics / Requirements**

The proposed reserve pit is 70' x 150' x 10' deep located within cut on the south east corner of the location. A 20 mil liner with a felt sub-liner is planned by Kerr McGee.

**Closed Loop Mud Required?** N    **Liner Required?** Y    **Liner Thickness** 20    **Pit Underlayment Required?** Y

**Other Observations / Comments**

Ben Williams representing the UDWR stated the area is classified as yearlong critical habitat for antelope. He stated that the lack of water not forage is the limiting factor affecting the herd in the area. He recommended no restrictions for antelope. No other wildlife is expected to be significantly affected. He gave Jim Davis of SITLA and Carroll Estes of Kerr McGee a copy of his wildlife evaluation and a UDWR recommended seed mix to be used when revegetating the location.

The area was covered with snow. ATV's were used to access the site.

Floyd Bartlett  
Evaluator

2/13/2007  
Date / Time

Casing Schematic

BHP  $0.052(9450)11.5 = 5651 \text{ psi}$   
anticipate 5859 psi

Gas  $.12(9450) = 1134$   
 $5651 - 1134 = 4517 \text{ psi, MASP}$

BOPE 5M ✓

9-5/8"  
MW 8.4  
Frac 19.3

Burst 3520  
 $70\% = 2464 \text{ psi}$

Max P @ surf. shoe  
 $.22(9450) = 1639$   
 $5651 - 1639 = 4012 \text{ psi}$

Test to 2464 psi ✓

Stop surf amt ✓

✓ Adequate OKD 2/28/07

4-1/2"  
MW 11.5

TOC @  
0.

Whta

1001' TOC w/o w/o  
1140' Green River  
1366' Birds Nest Water  
TOC @ 1507. Option 1 - Topout  
1845' Mahogany ✓ OK.  
Surface  
2000. MD

4300'± BMSW  
4321' Wasatch

7263' Mesaverde

8268' MVU 2

8781' MVL 1

Production  
9450. MD

Well name:

**2007-02 Kerr McGee NBU 1021-30N**Operator: **Kerr McGee Oil & Gas Onshore L.P.**String type: **Surface**

Project ID:

**43-047-39025**Location: **Uintah County, Utah****Design parameters:****Collapse**Mud weight: 8,400 ppg  
Design is based on evacuated pipe.**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 103 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 1,507 ft

**Burst**Max anticipated surface pressure: 1,760 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,000 psi

No backup mud specified.

**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)Tension is based on buoyed weight.  
Neutral point: 1,751 ft**Non-directional string.****Re subsequent strings:**Next setting depth: 9,450 ft  
Next mud weight: 11,500 ppg  
Next setting BHP: 5,645 psi  
Fracture mud wt: 19,250 ppg  
Fracture depth: 2,000 ft  
Injection pressure: 2,000 psi

| Run Seq | Segment Length (ft) | Size (in)               | Nominal Weight (lbs/ft) | Grade            | End Finish           | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in)     | Internal Capacity (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1       | 2000                | 9.625                   | 36.00                   | J-55             | ST&C                 | 2000                 | 2000                | 8.796                   | 868.1                   |
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor  | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor  | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor   |
| 1       | 873                 | 2020                    | 2.315                   | 2000             | 3520                 | 1.76                 | 63                  | 394                     | 6.25 J                  |

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & MineralsPhone: (801) 538-5357  
FAX: (801) 359-3940Date: February 20, 2007  
Salt Lake City, Utah**Remarks:**Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes.  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:

**2007-02 Kerr McGee NBU 1021-30N**Operator: **Kerr McGee Oil & Gas Onshore L.P.**String type: **Production**

Project ID:

43-047-39025

Location: **Uintah County, Utah****Design parameters:****Collapse**

Mud weight: 11,500 ppg

Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No

Surface temperature: 75 °F

Bottom hole temperature: 207 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,500 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure:

3,566 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 5,645 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.

Neutral point: 7,826 ft

| Run Seq | Segment Length (ft) | Size (in)               | Nominal Weight (lbs/ft) | Grade            | End Finish           | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in)     | Internal Capacity (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1       | 9450                | 4.5                     | 11.60                   | I-80             | LT&C                 | 9450                 | 9450                | 3.875                   | 824.7                   |
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor  | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor  | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor   |
| 1       | 5645                | 6360                    | 1.127                   | 5645             | 7780                 | 1.38                 | 91                  | 212                     | 2.34 J                  |

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & MineralsPhone: (801) 538-5357  
FAX: (801) 359-3940Date: February 20, 2007  
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 9450 ft, a mud weight of 11.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

**From:** Ed Bonner  
**To:** Mason, Diana  
**Date:** 2/14/2007 9:50 AM  
**Subject:** The following wells have been given cultural resource clearance by the Trust Lands Cultural Resource

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil; sheila.upchego...  
The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Kerr McGee Oil & Gas Onshore LP  
NBU 1022-7H-4 (API 43 047 38570)  
NBU 1021-2E (API 43 047 38838)  
NBU 1021-2F (API 43 047 38839)  
NBU 1021-2M (API 43 047 38841)  
NBU 1021-2K (API 43 047 38842)  
NBU 1021-2L (API 43 047 38843)  
NBU 1021-2J (API 43 047 38844)  
NBU 1021-36D (API 43 047 38845)  
NBU 1021-36E (API 43 047 38846)  
NBU 1021-36F (API 43 047 38847)  
NBU 1021-36N (API 43 047 38848)  
NBU 1021-36K (API 43 047 38849)  
NBU 1021-36C (API 43 047 38850)  
NBU 1021-1G (API 43 047 39001)  
NBU 1021-1O (API 43 047 39002)  
NBU 1021-1P (API 43 047 39003)  
NBU 1021-30I (API 43 047 39020)  
NBU 1021-30J (API 43 047 39021)  
NBU 1021-30K (API 43 047 39022)  
NBU 1021-30L (API 43 047 39023)  
NBU 1021-30M (API 43 047 39024)  
NBU 1021-30N (API 43 047 39025)

If you have any questions regarding this matter please give me a call.

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

February 7, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Natural Buttes Unit Uintah  
County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

| API # | WELL NAME | LOCATION |
|-------|-----------|----------|
|-------|-----------|----------|

(Proposed PZ Wasatch/MesaVerde)

|              |              |                       |                   |
|--------------|--------------|-----------------------|-------------------|
| 43-047-39004 | NBU 1021-19C | Sec. 19 T. 10S R. 21E | 0620 FNL 1904 FWL |
| 43-047-39005 | NBU 1021-19D | Sec. 19 T. 10S R. 21E | 0637 FNL 0755 FWL |
| 43-047-39006 | NBU 1021-19E | Sec. 19 T. 10S R. 21E | 2146 FNL 0879 FWL |
| 43-047-39007 | NBU 1021-19K | Sec. 19 T. 10S R. 21E | 2181 FSL 2092 FWL |
| 43-047-39008 | NBU 1021-19N | Sec. 19 T. 10S R. 21E | 0462 FSL 1845 FWL |
| 43-047-39009 | NBU 1021-29L | Sec. 29 T. 10S R. 21E | 1398 FSL 0190 FWL |
| 43-047-39010 | NBU 1021-29O | Sec. 29 T. 10S R. 21E | 0615 FSL 2115 FEL |
| 43-047-39011 | NBU 1021-29N | Sec. 29 T. 10S R. 21E | 0250 FSL 1764 FWL |
| 43-047-39012 | NBU 1021-29J | Sec. 29 T. 10S R. 21E | 1532 FSL 2192 FEL |
| 43-047-39013 | NBU 1021-29K | Sec. 29 T. 10S R. 21E | 1804 FSL 2143 FWL |
| 43-047-39014 | NBU 1021-29I | Sec. 29 T. 10S R. 21E | 2060 FSL 0962 FEL |
| 43-047-39015 | NBU 1021-29G | Sec. 29 T. 10S R. 21E | 2090 FNL 1960 FEL |
| 43-047-39016 | NBU 1021-29F | Sec. 29 T. 10S R. 21E | 1718 FNL 1529 FWL |
| 43-047-39017 | NBU 1021-29E | Sec. 29 T. 10S R. 21E | 2635 FNL 1010 FWL |
| 43-047-39018 | NBU 1021-29C | Sec. 29 T. 10S R. 21E | 0476 FNL 2501 FWL |
| 43-047-39019 | NBU 1021-29A | Sec. 29 T. 10S R. 21E | 0170 FNL 0627 FEL |
| 43-047-39020 | NBU 1021-30I | Sec. 30 T. 10S R. 21E | 2131 FSL 0387 FEL |
| 43-047-39021 | NBU 1021-30J | Sec. 30 T. 10S R. 21E | 1901 FSL 1827 FEL |
| 43-047-39022 | NBU 1021-30K | Sec. 30 T. 10S R. 21E | 1398 FSL 2686 FWL |
| 43-047-39023 | NBU 1021-30L | Sec. 30 T. 10S R. 21E | 1602 FSL 0980 FWL |
| 43-047-39024 | NBU 1021-30M | Sec. 30 T. 10S R. 21E | 0612 FSL 0462 FWL |



Page 2

43-047-39025 NBU 1021-30N Sec. 30 T. 10S R. 21E 0942 FSL 1876 FWL  
43-047-39026 NBU 1021-32A Sec. 32 T. 10S R. 21E 0646 FNL 0955 FEL  
43-047-39027 NBU 1021-32B Sec. 32 T. 10S R. 21E 0837 FNL 2117 FEL  
43-047-39028 NBU 1021-32C Sec. 32 T. 10S R. 21E 0664 FNL 1840 FWL  
43-047-39029 NBU 1021-32F Sec. 32 T. 10S R. 21E 1909 FNL 2165 FWL  
43-047-39001 NBU 1021-01G Sec. 01 T. 10S R. 21E 2660 FSL 1765 FEL  
43-047-39002 NBU 1021-01O Sec. 01 T. 10S R. 21E 0245 FSL 2619 FEL  
43-047-39003 NBU 1021-01P Sec. 01 T. 10S R. 21E 0888 FSL 1309 FEL  
43-047-39030 NBU 1022-18A Sec. 18 T. 10S R. 22E 1007 FNL 0512 FEL  
43-047-39031 NBU 1022-24I Sec. 24 T. 10S R. 22E 2045 FSL 1166 FEL  
43-047-39032 NBU 1022-25B Sec. 25 T. 10S R. 22E 0403 FNL 1971 FEL  
43-047-39033 NBU 1022-25H Sec. 25 T. 10S R. 22E 2604 FNL 0825 FEL

Our records indicate the NBU 1022-25H is closer than 460 feet from the Natural Buttes Unit boundary (approximately 36 feet).

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:2-7-07



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

February 28, 2007

Kerr-McGee Oil & Gas Onshore LP  
1368 S 1200 E  
Vernal, UT 84078

Re: Natural Buttes Unit 1021-30N Well, 942' FSL, 1876' FWL, SE SW, Sec. 30,  
T. 10 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39025.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor (via e-mail)  
SITLA  
Bureau of Land Management, Vernal District Office

**Location:** SE SW                      **Sec.** 30                      **T.** 10 South                      **R.** 21 East

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
7. Surface casing shall be cemented to the surface.

# DIVISION OF OIL, GAS AND MINING

## ***SPUDDING INFORMATION***

Name of Company: Kerr-McGee Oil & Gas Onshore, LP

Well Name: NBU 1021-30N

API No: 43-047-39025 Lease Type: State

Section 30 Township 10S Range 21E County Uintah

Drilling Contractor Rocky Mountain Drilling Rig # Rathole

### **SPUDDED:**

Date 5-29-07

Time 3:00 PM

How Dry

***Drilling will Commence:*** \_\_\_\_\_

Reported by Lou Weldon

Telephone # 435-828-7035

Date 5-30-07 Signed RM

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
Address: 1368 SOUTH 1200 EAST  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-7024

**Well 1**

| API Number   | Well Name             |                   | QQ        | Sec | Twp | Rng                              | County |
|--|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| 4304739025   | NBU 1021-30N          |                   | SESW      | 30  | 10S | 21E                              | UINTAH |
| Action Code  | Current Entity Number | New Entity Number | Spud Date |     |     | Entity Assignment Effective Date |        |
| <u>B</u>   | 99999                 | <u>2900</u>       | 5/29/2007 |     |     | <u>5/30/07</u>                   |        |
| Comments: <u>MIRU ROCKY MTN BUCKET RIG. WSMVD</u><br>SPUD WELL LOCATION ON 05/29/2007 AT 1500 HRS. |                       |                   |           |     |     |                                  |        |

**Well 2**

| API Number  | Well Name             |                   | QQ        | Sec | Twp | Rng                              | County |
|---|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| 4304736868  | HATCH 923-15N         |                   | SESW      | 15  | 9S  | 23E                              | UINTAH |
| Action Code   | Current Entity Number | New Entity Number | Spud Date |     |     | Entity Assignment Effective Date |        |
| <u>A</u>  | 99999                 | <u>16129</u>      | 5/28/2007 |     |     | <u>5/30/07</u>                   |        |
| Comments: <u>MIRU PETE MARTIN BUCKET RIG. WSMVD</u><br>SPUD WELL LOCATION ON 05/28/2007 AT 1100 HRS |                       |                   |           |     |     |                                  |        |

**Well 3**

| API Number  | Well Name             |                   | QQ        | Sec | Twp | Rng                              | County |
|-------------|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
|             |                       |                   |           |     |     |                                  |        |
| Action Code | Current Entity Number | New Entity Number | Spud Date |     |     | Entity Assignment Effective Date |        |
|             |                       |                   |           |     |     |                                  |        |
| Comments:   |                       |                   |           |     |     |                                  |        |

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

(5/2000)

|                             |                             |
|-----------------------------|-----------------------------|
| To <u>BARBARA RUSSELL</u>   | From <u>SHEILA UPCHEGO</u>  |
| Co./Dept. <u>UDOGM</u>      | Co. <u>KATO</u>             |
| Phone <u>(901) 538-6330</u> | Phone <u>(435) 781-7024</u> |
| Fax # <u>(901) 254-3940</u> | Fax # <u>(435) 781-7094</u> |

SHEILA UPCHEGO

Name (Print Name)

Signature

SENIOR LAND SPECIALIST

Title

6/30/2007

Date

**RECEIVED**  
**MAY 30 2007**

DIV. OF OIL, GAS &amp; MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

|   |  |   |
|---|--|---|
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____ |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>ML-22793 |
| 2. NAME OF OPERATOR:<br>KERR MCGEE OIL & GAS ONSHORE LP   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
| 3. ADDRESS OF OPERATOR:<br>1368 SOUTH 1200 EAST VERNAL UT 84078   |  | 7. UNIT or CA AGREEMENT NAME:<br>UNIT #891008900A   |
| PHONE NUMBER:<br>(435) 781-7024   |  | 8. WELL NAME and NUMBER:<br>NBU 1021-30N            |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: 942'FSL, 1876'FWL   |  | 9. API NUMBER:<br>4304739025                        |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  |  | 10. FIELD AND POOL, OR WILDCAT:<br>NATURAL BUTTES   |
| COUNTY: UINTAH  |  | STATE: UTAH   |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |
|---|---|---|--|
| <input type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br>_____          | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
|   | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL      |
|   | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON           |
|   | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                 |
|   | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                 |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:<br>_____ | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                |
|   | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                |
|   | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: WELL SPUD   |
|   | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU ROCKY MTN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 05/29/2007 AT 1500 HRS

RECEIVED

JUN 05 2007

DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE

DATE 5/30/2007

(This space for State use only)

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

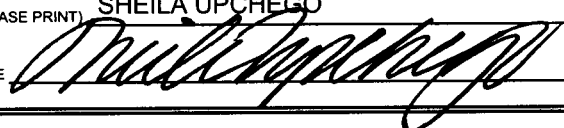
|   |  |   |
|---|--|---|
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____                 |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>ML-22793   |
| 2. NAME OF OPERATOR:<br>KERR MCGEE OIL & GAS ONSHORE LP   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:   |
| 3. ADDRESS OF OPERATOR:<br>1368 SOUTH 1200 EAST VERNAL UT 84078   |  | 7. UNIT or CA AGREEMENT NAME:<br>UNIT #891008900A   |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: 942'FSL, 1876'FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 30 10S 21E |  | 8. WELL NAME and NUMBER:<br>NBU 1021-30N<br>9. API NUMBER:<br>4304739025<br>10. FIELD AND POOL, OR WILDCAT:<br>NATURAL BUTTES |
|   |  | COUNTY: UINTAH<br>STATE: UTAH   |

| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA   |   |   |   |
|---|---|---|---|
| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |   |
| <input type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br><br>Approximate date work will start:<br>_____<br><br><input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br><br>Date of work completion:<br>_____ | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION      |
|   | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL           |
|   | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                |
|   | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                      |
|   | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                      |
|   | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                     |
|   | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                     |
|   | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: SET SURFACE CSG. |
|   | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |   |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU BILL MARTIN AIR RIG ON 06/03/2007. DRILLED 12 1/4" SURFACE HOLE TO 2070'. RAN 9 5/8" 32.3# H-40 SURFACE CSG. LEAD CMT W/170 SX HIFILL CLASS G @11.0 PPG 3.82 YIELD. TAILED CMT W/200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. GOOD RETURNS THROUGH OUT JOB 10 +/- BBL LEAD CMT TO PIT. RAN 200' OF 1" PIPE, CMT W/145 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN 1" PIPE GOOD CMT TO SURFACE AND FELL BACK. TOP OUT W/50 SX PREM CLASS G @15.8 PPG 1.15 YIELD DOWN BACKSIDE. GOOD CMT TO SURFACE HOLE STAYED FULL.

WORT.

|   |                                    |
|---|------------------------------------|
| NAME (PLEASE PRINT) SHEILA UPCHEGO  | TITLE SENIOR LAND ADMIN SPECIALIST |
| SIGNATURE  | DATE 6/6/2007                      |

(This space for State use only)

**RECEIVED**  
**JUN 11 2007**  
DIV. OF OIL, GAS & MINING



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
KERR MCGEE OIL & GAS ONSHORE LP

3. ADDRESS OF OPERATOR:  
1368 SOUTH 1200 EAST VERNAL UT 84078

PHONE NUMBER:  
(435) 781-7024

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 942'FSL, 1876'FWL

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 30 10S 21E

5. LEASE DESIGNATION AND SERIAL NUMBER:  
ML-22793

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
UNIT #891008900A

8. WELL NAME and NUMBER:  
NBU 1021-30N

9. API NUMBER:  
4304739025

10. FIELD AND POOL, OR WILDCAT:  
NATURAL BUTTES

COUNTY: UINTAH

STATE:  
UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |
|---|---|---|--|
| <input type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br>_____          | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION               |
|   | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                    |
|   | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                         |
|   | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                               |
|   | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                               |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:<br>_____ | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                              |
|   | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                              |
|   | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: FINAL DRILLING OPERATIONS |
|   | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2070' TO 9360' ON 07/12/2007. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/360 SX PREM LITE II @11.4 PPG 2.91 YIELD. TAILED CMT W/1322 SX 50/50 POZ @14.3 PPG 1.31 YIELD. DISPLACE W/144 BBL BUMP PLUG FLOATS HELD. ATTEMPT TO LAND CASING HANGER. HANGER WOULD NOT GO DOWN ALL THE WAY PULL PLUG ON BOWL AND VISUALLY CHECK HANGER IN BOWL NOT LANDING ALL THE WAY TEST HANGER 5000/10 MIN OKAY. CLEAN MUD PITS.

RELEASED PIONEER RIG 41 ON 07/14/2007 AT 0200 HRS.

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE

DATE 7/17/2007

(This space for State use only)

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DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8  
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

|  |  |   |
|--|--|---|
| 1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____  |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>ML-22793                 |
| b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____ |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                |
| 2. NAME OF OPERATOR:<br>KERR MCGEE OIL & GAS ONSHORE LP  |  | 7. UNIT or CA AGREEMENT NAME<br>UNIT #891008900A                    |
| 3. ADDRESS OF OPERATOR:<br>1368 S 1200 E VERNAL UT 84078   |  | 8. WELL NAME and NUMBER:<br>NBU 1021-30N                            |
| 4. LOCATION OF WELL (FOOTAGES)<br>AT SURFACE: 942'FSL, 1876'FWL<br><br>AT TOP PRODUCING INTERVAL REPORTED BELOW:<br><br>AT TOTAL DEPTH:  |  | 9. API NUMBER:<br>4304739025  |
| 10. FIELD AND POOL, OR WILDCAT<br>NATURAL BUTTES   |  | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>SESW 30 10S 21E |
| 12. COUNTY<br>UINTAH   |  | 13. STATE<br>UTAH   |

|   |                                     |  |   |  |
|---|-------------------------------------|--|---|--|
| 14. DATE SPUDDED:<br>5/29/2007  | 15. DATE T.D. REACHED:<br>7/12/2007 | 16. DATE COMPLETED:<br>8/2/2007          | ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>   | 17. ELEVATIONS (DF, RKB, RT, GL):<br>5348'GL |
| 18. TOTAL DEPTH: MD 9,360<br>TVD  | 19. PLUG BACK T.D.: MD 9,296<br>TVD | 20. IF MULTIPLE COMPLETIONS, HOW MANY? * |   | 21. DEPTH BRIDGE MD<br>PLUG SET: TVD         |
| 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)<br>CBL-CCL-GR, SD, DSN, ACTR, |                                     |  | 23.<br>WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis)<br>WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report)<br>DIRECTIONAL SURVEY? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit copy) |  |

24. CASING AND LINER RECORD (Report all strings set in well)

| HOLE SIZE | SIZE/GRADE | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|-----------|------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 20"       | 14" STL    | 36.7#          |          | 40          |                      | 28                         |                     |               |               |
| 12 1/4"   | 9 5/8 H-40 | 32.3#          |          | 2,070       |                      | 565                        |                     |               |               |
| 7 7/8"    | 4 1/2 I-80 | 11.6#          |          | 9,360       |                      | 1682                       |                     |               |               |
|           |            |                |          |             |                      |                            |                     |               |               |
|           |            |                |          |             |                      |                            |                     |               |               |
|           |            |                |          |             |                      |                            |                     |               |               |

25. TUBING RECORD

| SIZE   | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|--------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
| 2 3/8" | 8,112          |                 |      |                |                 |      |                |                 |

26. PRODUCING INTERVALS

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) | INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS   |
|----------------|----------|-------------|-----------|--------------|-------------------------|------|-----------|--|
| (A) WASATCH    | 6,290    | 6,300       |           |              | 6,290 6,300             | 0.35 | 36        | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| (B) MESAVERDE  | 7,431    | 8,902       |           |              | 7,431 8,902             | 0.36 | 116       | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| (C)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
| (D)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |

27. PERFORATION RECORD

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL                 |
|----------------|---|
| 6290'-6300'    | PMP 926 BBLS SLICK H2O & 45,570# 30/50 SD   |
| 7431'-8902'    | PMP 6276 BBLS SLICK H2O & 223,730# 30/50 SD |

29. ENCLOSED ATTACHMENTS:

- ☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY  
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER: \_\_\_\_\_

30. WELL STATUS:

PROD

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DIV OF OIL, GAS & MINING

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

|                                  |  |                        |  |                      |  |                             |  |                 |  |                   |  |                              |  |                          |  |                   |  |                     |  |                          |  |
|----------------------------------|--|------------------------|--|----------------------|--|-----------------------------|--|-----------------|--|-------------------|--|------------------------------|--|--------------------------|--|-------------------|--|---------------------|--|--------------------------|--|
| DATE FIRST PRODUCED:<br>8/2/2007 |  | TEST DATE:<br>8/4/2007 |  | HOURS TESTED:<br>24  |  | TEST PRODUCTION<br>RATES: → |  | OIL – BBL:<br>0 |  | GAS – MCF:<br>920 |  | WATER – BBL:<br>240          |  | PROD. METHOD:<br>FLOWING |  |                   |  |                     |  |                          |  |
| CHOKE SIZE:<br>20/64             |  | TBG. PRESS.<br>609     |  | CSG. PRESS.<br>1,201 |  | API GRAVITY                 |  | BTU – GAS       |  | GAS/OIL RATIO     |  | 24 HR PRODUCTION<br>RATES: → |  | OIL – BBL:<br>0          |  | GAS – MCF:<br>920 |  | WATER – BBL:<br>240 |  | INTERVAL STATUS:<br>PROD |  |

## INTERVAL B (As shown in item #26)

|                                  |                    |                        |             |                     |               |                              |                 |                   |                     |                          |                          |
|----------------------------------|--------------------|------------------------|-------------|---------------------|---------------|------------------------------|-----------------|-------------------|---------------------|--------------------------|--------------------------|
| DATE FIRST PRODUCED:<br>8/2/2007 |                    | TEST DATE:<br>8/4/2007 |             | HOURS TESTED:<br>24 |               | TEST PRODUCTION<br>RATES: →  |                 | OIL – BBL:<br>0   | GAS – MCF:<br>920   | WATER – BBL:<br>240      | PROD. METHOD:<br>FLOWING |
| CHOKE SIZE:<br>20/64             | TBG. PRESS.<br>609 | CSG. PRESS.<br>1,201   | API GRAVITY | BTU – GAS           | GAS/OIL RATIO | 24 HR PRODUCTION<br>RATES: → | OIL – BBL:<br>0 | GAS – MCF:<br>920 | WATER – BBL:<br>240 | INTERVAL STATUS:<br>PROD |                          |

## INTERVAL C (As shown in item #26)

|                      |             |             |             |               |               |                              |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|------------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION<br>RATES: →  | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS     | GAS/OIL RATIO | 24 HR PRODUCTION<br>RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

## INTERVAL D (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

| Formation            | Top<br>(MD)    | Bottom<br>(MD) | Descriptions, Contents, etc. | Name | Top<br>(Measured Depth) |
|----------------------|----------------|----------------|------------------------------|------|-------------------------|
| WASATCH<br>MESAVERDE | 4,224<br>7,272 | 7,272          |                              |      |                         |

## 35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) SHEILA UPCHEGO

TITLE SENIOR LAND ADMIN SPECIALIST

SIGNATURE

DATE 8/31/2007

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
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Salt Lake City, Utah 84114-5801

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